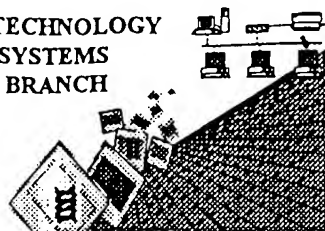# RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10/039,119_

Source: _OIPE_

Date Processed by STIC: _4/17/02_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: **patin21help@uspto.gov** or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: **patin3help@uspto.gov** or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , EFS Submission User Manual - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

   Or

   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

ERROR DETECTED   **SUGGESTED CORRECTION**   SERIAL NUMBER: _____

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 _____ Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 _____ Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 _____ Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 _____ Variable Length

Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 _____ PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7 _____ Skipped Sequences
(OLD RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 _____ Skipped Sequences
(NEW RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 _____ Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 _____ Invalid <213>
Response

Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11 _____ Use of <220>

Sequence(s) 4 - 1 missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 _____ PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 _____ Misuse of n

n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

RAW SEQUENCE LISTING   DATE: 04/17/2002
PATENT APPLICATION: US/10/039,119   TIME: 14:12:50

Input Set : A:\STEM1110-4.ST25.txt
Output Set: N:\CRF3\04172002\J039119.raw

```
 2 <110> APPLICANT: STEM CELL PHARMACEUTICALS, INC.
 3        TWARDZIK, Daniel R.
 4        FELKER, Thomas S.
 5        PERNET, Andre
 6        PASKELL, Stefan
 8 <120> TITLE OF INVENTION: TGF-alpha POLYPEPTIDES, FUNCTIONAL FRAGMENTS AND METHODS OF
USE THEREFOR
10 <130> FILE REFERENCE: STEM1110-4
12 <140> CURRENT APPLICATION NUMBER: US 10/039,119
13 <141> CURRENT FILING DATE: 2002-01-04
15 <150> PRIOR APPLICATION NUMBER: US 09/641,587
16 <151> PRIOR FILING DATE: 2000-08-17
18 <150> PRIOR APPLICATION NUMBER: US 09/492,935
19 <151> PRIOR FILING DATE: 2000-01-27
21 <150> PRIOR APPLICATION NUMBER: US 09/387,567
22 <151> PRIOR FILING DATE: 1999-08-19
24 <160> NUMBER OF SEQ ID NOS: 7
26 <170> SOFTWARE: PatentIn version 3.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 50
30 <212> TYPE: PRT
31 <213> ORGANISM: Homo sapiens
33 <400> SEQUENCE: 1
35 Val Val Ser His Phe Asn Asp Cys Pro Asp Ser His Thr Gln Phe Cys
36 1               5                   10                  15
38 Phe His Gly Thr Cys Arg Phe Leu Val Gln Glu Asp Lys Pro Ala Cys
39              20                  25                  30
41 Val Cys His Ser Gly Tyr Val Gly Ala Arg Cys Glu His Ala Asp Leu
42           35                  40                  45
44 Leu Ala
45      50
47 <210> SEQ ID NO: 2
48 <211> LENGTH: 50
49 <212> TYPE: PRT
50 <213> ORGANISM: Rattus norvegicus
52 <400> SEQUENCE: 2
54 Val Val Ser His Phe Asn Lys Cys Pro Asp Ser His Thr Gln Tyr Cys
55 1               5                   10                  15
57 Phe His Gly Thr Cys Arg Phe Leu Val Gln Glu Glu Lys Pro Ala Cys
58              20                  25                  30
60 Val Cys His Ser Gly Tyr Val Gly Val Arg Cys Glu His Ala Asp Leu
61           35                  40                  45
63 Asp Ala
64      50
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/039,119

DATE: 04/17/2002
TIME: 14:12:50

Input Set : A:\STEM1110-4.ST25.txt
Output Set: N:\CRF3\04172002\J039119.raw

```
66 <210> SEQ ID NO: 3
67 <211> LENGTH: 57
68 <212> TYPE: PRT
69 <213> ORGANISM: Artificial sequence
71 <220> FEATURE:
72 <223> OTHER INFORMATION: A modified human TGF-alpha sequence
74 <400> SEQUENCE: 3
76 Ser Leu Ser Leu Pro Ala Met Val Val Ser His Phe Asn Asp Cys Pro
77 1               5                   10                  15
79 Asp Ser His Thr Gln Phe Cys Phe His Gly Thr Cys Arg Phe Leu Val
80              20                  25                  30
82 Gln Glu Asp Lys Pro Ala Cys Val Cys His Ser Gly Tyr Val Gly Ala
83          35                  40                  45
85 Arg Cys Glu His Ala Asp Leu Leu Ala
86      50                  55
88 <210> SEQ ID NO: 4
89 <211> LENGTH: 11
90 <212> TYPE: PRT
91 <213> ORGANISM: Artificial sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Artificial peptide sequence
96 <220> FEATURE:
97 <221> NAME/KEY: VARIANT
98 <222> LOCATION: (1)..(10)
99 <223> OTHER INFORMATION: Xaa at residue 1, 5, 7 to 9 is independently V, G or A; Xaa
at
100         residue 6 is Y or F; and Xaa at residue 10 is R or K
102 <400> SEQUENCE: 4
```
W--> 104 Xaa Cys His Ser Xaa Xaa Xaa Xaa Xaa Xaa Cys
```
105 1               5                   10
107 <210> SEQ ID NO: 5
108 <211> LENGTH: 7
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: Artificial peptide sequence
115 <220> FEATURE:
116 <221> NAME/KEY: VARIANT
117 <222> LOCATION: (1)..(7)
118 <223> OTHER INFORMATION: Xaa at residue 1 and 4 is E or D; Xaa at residue 3 and 7 is
V, G,
119         or A; Xaa at residue 5 is L or I; and Xaa at residue 6 is D or E
122 <400> SEQUENCE: 5
```
W--> 124 Xaa His Xaa Xaa Xaa Xaa Xaa
```
125 1               5
127 <210> SEQ ID NO: 6
128 <211> LENGTH: 18
129 <212> TYPE: PRT
130 <213> ORGANISM: Artificial sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Artificial peptide sequence
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The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING   DATE: 04/17/2002
PATENT APPLICATION: US/10/039,119   TIME: 14:12:50

Input Set : **A:\STEM1110-4.ST25.txt**
Output Set: **N:\CRF3\04172002\J039119.raw**

```
    135 <220> FEATURE:
    136 <221> NAME/KEY: VARIANT
    137 <222> LOCATION: (1)..(18)
    138 <223> OTHER INFORMATION: Xaa at residue 1, 5, 7-9, 14, 18 is indep. V, G, or A; Xaa
at
    139        residue 6 is Y or F; Xaa at residue 10 is R or K; Xaa at residue 12,
    140        15 is indep. E or D; Xaa at residue 16 is L or I; Xaa at residue
    141        17 is D or E
    143 <400> SEQUENCE: 6
W--> 145 Xaa Cys His Ser Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa His Xaa Xaa Xaa
    146 1               5                   10                  15
W--> 148 Xaa Xaa
    151 <210> SEQ ID NO: 7
    152 <211> LENGTH: 7
    153 <212> TYPE: PRT
    154 <213> ORGANISM: Artificial sequence
    156 <220> FEATURE:
    157 <223> OTHER INFORMATION: Artificial peptide sequence
    159 <220> FEATURE:
    160 <221> NAME/KEY: VARIANT
    161 <222> LOCATION: (1)..(7)
    162 <223> OTHER INFORMATION: Xaa at residue 1 and 2 is indep. V, G, and A; Xaa at residue
7 is
    163        K or D
    165 <400> SEQUENCE: 7
W--> 167 Xaa Xaa Ser His Phe Asn Xaa
    168 1               5
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/039,119

DATE: 04/17/2002
TIME: 14:12:51

Input Set : **A:\STEM1110-4.ST25.txt**
Output Set: **N:\CRF3\04172002\J039119.raw**

```
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
```